

**REMARKS/ARGUMENTS**

Reconsideration of the application is requested.

Claims 1-13 remain in the application.

In the section entitled "Claim Rejections - 35 USC § 103" on pages 2-4 of the above-mentioned Office action, claims 1, 3, and 5-7 have been rejected as being unpatentable over Chiyoe (Japanese Patent Application publication 09-312430) in view of Pepper (US Pat No. 5,926,494) and Graham (US Pat. No. 3,727,219) under 35 U.S.C. § 103(a); claims 8-9 have been rejected as being unpatentable over Chiyoe in view of Pepper and Brauch et al. (US Pat. No. 5,553,088) under 35 U.S.C. § 103(a); claims 10-13 have been rejected as being unpatentable over Chiyoe in view of Pepper and Itai (US Pat. No. 5,148,441) under 35 U.S.C. § 103(a).

As will be explained below, it is believed that the claims were patentable over the cited art in their original form and the claims have, therefore, not been amended to overcome the references.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claim 1 calls for, inter alia:

a plurality of crystal wafers disposed in said resonator and are optically coupled to one another and form a common beam path for the laser beam;

a pumping light source for generating a pumping light beam whose optical axis is collinear with respect to an optical axis of the laser beam, said pumping light source disposed upstream of said resonator; and

at least one lens functioning as an imaging element for focusing the pumping light beam emerging from one of said crystal wafers onto another one of said crystal wafers disposed downstream, said lens disposed within said resonator.

The Examiner has stated that Chiyoe does not disclose an imaging element within the resonator. However, the Examiner has stated that Pepper discloses an annular imaging relay lens 42 within the resonator and therefore it would have been obvious to a person skilled in the art at the time of the invention to modify the Chiyoe layer resonator with the imaging relay lens of Pepper.

Applicants cannot agree with the Examiner's conclusion.

In the configurations according to Figs. 4 and 5, Pepper uses two optical pump beams (spatially modulated optical pump beams 14, 15 with the same two-dimensional pumping pattern, see column 8, line 29) with an inhomogeneous beam cross-section (see column 5, line 36) in a resonator with two laser active discs optically connected one after the other. The optical

pump beams radiate, each separately, onto a laser active disc in order to minimize, among other things, parasitic oscillation modes (column 5, lines 37-38).

The coupling of two or more discs results in a problem for Pepper in that laser light emitted from an active region (gain region 10) of a first disc or pump light dispersed therefrom radiates onto an inactive region (loss region 12) of a second (neighboring) disc and excites the inactive region. In that case, the now radiated inactive region of the second disc would also become laser active because the disc itself is physically not modified (see column 2, lines 19-20), but is constructed homogeneously. Active and inactive regions are created in Pepper solely from radiation with the optical pump beam or its shadowing. In order to avoid the excitation of the inactive region, Pepper adds the lens 42 to the beam path of the laser. Thus, the inactive regions of a disc are not only shadowed by the corresponding optical pump beam via the optical masks 40,41, but also by neighboring discs via the imaging lens.

In Chiyoe, neither is an inhomogeneous optical pump beam used nor is the problem of parasitic oscillations mentioned. The problems described in Pepper do not occur in Chiyoe.

Therefore, the person of skill in the art would neither be

suggested to nor would he/she be prompted to insert the lens disclosed in Pepper into the resonator disclosed in Chiyoe.

The additional references do not make up for the deficiencies of Chiyoe and Pepper.

Claim 1 is, therefore, believed to be patentable over the art and since all of the dependent claims are ultimately dependent on claim 1, they are believed to be patentable as well.

Applicants acknowledge the Examiner's statement in the section entitled "Allowable Subject Matter" on pages 4-5 of the above-mentioned Office action that claims 2 and 4 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Since claim 1 is believed to be patentable as discussed above and claims 2 and 4 are ultimately dependent on claim 1, they are believed to be patentable in dependent form. A rewrite is therefore believed to be unnecessary at this time.

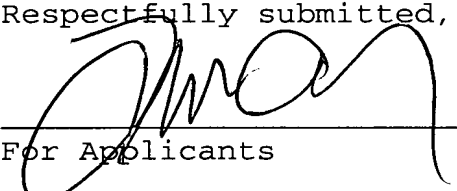
In view of the foregoing, reconsideration and allowance of claims 1-13 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate a telephone call so that, if possible, patentable language can be worked out.

If an extension of time for this paper is required, petition for extension is herewith made. Please charge any fees which might be due with respect to 37 CFR Sections 1.16 and 1.17 to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,

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For Applicants

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